



☆ Balance the Array



Michael gives an array $A = \{a_0, a_1, \dots, a_{N-1}\}$ to Dwight. Michael then asks Dwight to find out whether there exists an element in the array such that the sum of elements on its left is equal to the sum of elements on its right.

In other words, is there an index i such that, $a_0 + a_1 + \dots + a_{i-1} = a_{i+1} + a_{i+2} + \dots + a_{N-1}$.

Complete the function **balanceSum** to help Dwight answer that question.

Note: If there are no elements to the left or to the right, then that sum is considered to be zero.

Constraints

$$1 \leq N \leq 10^5$$

$$1 \leq A_i \leq 2 \times 10^4 \text{ where } 0 \leq i \leq N-1$$

Input Format

The first line contains a single integer N , the number of elements in array *arr*.

The next N lines for each test case contains N integers that comprise the array *arr*.

Output Format

Return the *index*, i , if there exists an element in the array such that the sum of elements to its left is equal to the sum of elements to its right. Otherwise, return -1. Indexing will use a 0-based index.

Sample Input #00

```
4
1
2
3
3
```

Sample Output#00

```
2
```

Explanation #00

$A[0] + A[1] = A[3]$, therefore index 2 satisfies.

YOUR ANSWER

We recommend you take a quick tour of our editor before you proceed. The timer will pause up to 90 seconds for the tour.

[Start tour](#)[Original code](#)

Java 7



```
1 ▶ import ↔;  
6  
7 public class Solution {  
8
```



VMWare Challenge UR Propel

⌚ 48m : 24s
to test end



1

2

3

4

```

9  /*
10  * Complete the function below.
11  */
12
13  static int isArray_Balanced(int[] arr) {
14      if (arr.length == 1) {
15          return 0;
16      }
17
18      int sum = 0;
19      for (int i = 0; i < arr.length; i++) {
20          sum += arr[i];
21      }
22
23      int left = 0;
24      for (int i = 0; i < arr.length; i++) {
25          if (left == sum - left - arr[i]) {
26              return i;
27          }
28          left += arr[i];
29      }

```



VMWare Challenge UR Propel

⌚ 48m : 24s
to test end



34
35



```

36  public static void main(String[] args) throws IOException{
    ↔ }
57  }

```

1

Line: 28 Col: 28

2

☐ Test against custom input

Run Code

Submit code & Continue

3

(You can submit any number of times)

4



Download sample test cases

The input/output files have Unix line endings. Do not use Notepad to edit them on windows.

Compiled successfully. All available test cases passed!

Test Case #1:



Test Case #2:



Test Case #2: Test Case #3: Test Case #4: Test Case #5: **Testcase 1: Success****Your Output**

2

Expected Output

2

Testcase 2: Success**Your Output**

Output hidden

Testcase 3: Success**Your Output**

Output hidden

Testcase 4: Success**Your Output**

Output hidden

Testcase 5: Success**Your Output**

Output hidden